Mumbai University

Syllabus + Books

B.Sc.IT: Semester – V

(Syllabus)

[2018 – 2019]

Paper - IV

Elective – I

Advanced Web Programming

– : SYLLABUS : –

UNIT I

INTRODUCING .NET | THE C# LANGUAGE | TYPES, OBJECTS AND NAMESPACES

⇒ **Introducing .NET:**
- The .NET Framework
- C#
- VB And The .NET Languages
- The Common Language Runtime
- The .NET Class Library

⇒ **The C# Language:**
- C# Language Basics
- Variables And Data Types
- Variable Operations
- Object-Based Manipulation
- Conditional Logic
- Loops
- Methods

⇒ **Types, Objects And Namespaces:**
- The Basics About Classes
- Building A Basic Class
- Value Types And Reference Types
- Understanding Namespaces And Assemblies
- Advanced Class Programming

UNIT II

WEB FORM FUNDAMENTALS | FORM CONTROLS | WEBSITE NAVIGATION

⇒ **Web Form Fundamentals:**
- Writing Code
- Using The Code-Behind Class
- Adding Event Handlers
- Understanding The Anatomy Of An ASP.NET Application
- Introducing Server Controls
- Using The Page Class
- Using Application Events
- Configuring An ASP.NET Application

⇒ **Form Controls:**
- Stepping Up To Web Controls
- Web Control Classes
- List Controls
- Table Controls
- Web Control Events And AutoPostBack
- Validation
- Understanding Validation
- Using The Validation Controls
- Rich Controls
- The Calendar
- The AdRotator
- Pages With Multiple Views
- User Controls And Graphics
- User Controls
- Dynamic Graphics
- The Chart Control

Turn Over ☞

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⇒ **Website Navigation:**
- Site Maps
- URL Mapping And Routing
- The SiteMapPath Control
- The TreeView Control
- The Menu Control

UNIT III

ERROR HANDLING, LOGGING AND TRACING | STATE MANAGEMENT | THEMES AND MASTER PAGES

⇒ **Error Handling, Logging And Tracing:**
- *Avoiding Common Errors*
- *Understanding Exception Handling*
- *Handling Exceptions*
- *Throwing Your Own Exceptions*
- *Using Page Tracing*

⇒ **State Management:**
- *Understanding The Problem Of State*
- *Using View State*
- *Transferring Information Between Pages*
- *Using Cookies*
- *Managing Session State*
- *Configuring Session State*
- *Using Application State*
- *Comparing State Management Options Styles*

⇒ **Themes And Master Pages:**
- *Styles*
- *Themes*
- *Master Page Basics*
- *Advanced Master Pages*

UNIT IV

ADO.NET FUNDAMENTALS | DATA BINDING | THE DATA CONTROLS:

⇒ **ADO.NET Fundamentals:**
- *Understanding Databases*
- *Configuring Your Database*
- *Understanding SQL Basics*
- *Understanding The Data Provider Model*
- *Using Direct Data Access*
- *Using Disconnected Data Access*

⇒ **Data Binding:**
- *Introducing Data Binding*
- *Using Single-Value Data Binding*
- *Using Repeated-Value Data Binding*
- *Working with Data Source Controls*

⇒ **The Data Controls:**
- *The GridView*
- *Formatting The GridView*
- *Selecting A GridView Row*
- *Editing With The GridView*
- *Sorting And Paging The GridView*
- *Using GridView Templates*
- *The DetailsView And FormView*

UNIT V

XML | SECURITY FUNDAMENTALS | ASP.NET AJAX

⇒ **XML:**
  - XML Explained
  - The XML Classes
  - XML Validation
  - XML Display And Transforms

⇒ **Security Fundamentals:**
  - Understanding Security Requirements
  - Authentication And Authorization
  - Forms Authentication
  - Windows Authentication

⇒ **ASP.NET AJAX:**
  - Understanding Ajax
  - Using Partial Refreshes
  - Using Progress Notification
  - Implementing Timed Refreshes
  - Working With The ASP.NET AJAX Control Toolkit

– : BOOKS : –

1.
BOOK: BEGINNING ASP.NET 4.5 IN C#
AUTHOR'S: MATTHEW MACDONALD
PUBLISHER: APRESS
YEAR: 2012
DOWNLOAD: @Blogger **|** @PDF **|** @Torrent
BUY: @Amazon **|** @Flipkart

2.
BOOK: MURACH'S C# 2015
AUTHOR'S: ANNE BOHEM **|** JOEL MURACH
PUBLISHER: MURACH
YEAR: 2016
EDITION: 3RD
DOWNLOAD: @Blogger **|** @PDF **|** @Torrent
BUY: @Amazon **|** @Flipkart

3.
BOOK: MURACH'S ASP.NET 4.6 WEB PROGRAMMING IN C# 2015
AUTHOR'S: MARY DELAMATER **|** ANNE BOHEM
PUBLISHER: SPD
YEAR: 2016
EDITION: 6TH
DOWNLOAD: @Blogger **|** @PDF **|** @Torrent
BUY: @Amazon **|** @Flipkart

4.
BOOK: ASP.NET 4.0 PROGRAMMING
AUTHOR'S: JOYDIP KANJILAL
PUBLISHER: TATA MCGRAW-HILL
YEAR: 2011
DOWNLOAD/BUY: @Blogger **|** @Amazon **|** @Flipkart

5.
BOOK: PROGRAMMING MICROSOFT ASP.NET
AUTHOR'S: DINO ESPOSITO
PUBLISHER: DREAMTECH PRESS
YEAR: 2011
DOWNLOAD: @Blogger **|** @PDF **|** @Torrent
BUY: @Amazon **|** @Flipkart

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6. **BOOK:** BEGINNING VISUAL C# 2010
AUTHOR'S: K. WATSON **|** C. NAGEL **|** J.H PADDERSON **|** J.D. REID **|** M.SKINNER
PUBLISHER: TATA MCGRAW-HILL
YEAR: 2010
DOWNLOAD/BUY: @Blogger **|** @Amazon **|** @Flipkart